

## Lyon County

### Estimated Economic Contribution of Agriculture, Food, and Food Processing Sectors

6/27/2019

Using the most recent IMPLAN data available (2017) adjusted for 2019, 27 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Lyon County economy.<sup>1</sup>

These 27 sectors have a total direct output of approximately **\$2.16 billion** and support **3,450 jobs** in Lyon County. Running the model for all 27 sectors simultaneously produces the following results:

| Agriculture, Food, and Food Processing Sector Contribution to Overall Lyon County Economy |               |               |                                |  |                        |
|---|---------------|---------------|--------------------------------|--|------------------------|
| Contribution Type <sup>2</sup>  | Employment    | % Employment  | Total Value Added <sup>3</sup> | Total Value Added % of Gross Regional Product <sup>4</sup> | Output <sup>5</sup>    |
| Direct Effect   | 3449.8        | 16.26%        | \$329,162,128                  | 23.97%   | \$2,162,507,665        |
| Indirect Effect   | 1450.5        | 6.84%         | \$106,395,752                  | 7.75%  | \$216,160,453          |
| Induced Effect  | 848.5         | 4.00%         | \$51,949,503                   | 3.78%  | \$98,480,730           |
| <b>Total Effect</b>   | <b>5748.8</b> | <b>27.10%</b> | <b>\$487,507,383</b>           | <b>35.50%</b>  | <b>\$2,477,148,848</b> |

As shown in the above table, agriculture, food, and food processing sectors support **5,749 jobs**, or **27.10%** of the entire workforce in the county.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 27 agriculture, food, and food processing sectors is approximately **\$487.5 million**, or **35.50% of the GRP**.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

1 Article on building a contribution analysis in IMPLAN that avoids double counting:

<https://implanhelp.zendesk.com/hc/en-us/articles/115002801513-Considerations-of-Contribution-Analysis>

2 Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

3 Value added = labor income + indirect business taxes + other property type income.

4 GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

5 Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the meat processed from carcasses sector is the top employer with **907 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Lyon County.

| Top Ten Agriculture, Food, and Food Processing Sectors by Employment                       |                  |               |
|--|------------------|---------------|
| Sector   | Total Employment | Total Output  |
| Meat processed from carcasses  | 906.8            | \$451,918,928 |
| Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming | 679.1            | \$65,161,096  |
| Dog and cat food manufacturing   | 510.5            | \$664,148,876 |
| Bread and bakery product, except frozen, manufacturing                                     | 446.4            | \$66,913,509  |
| Truck transportation   | 277.8            | \$39,236,177  |
| Wholesale trade  | 271.7            | \$52,839,334  |
| Animal, except poultry, slaughtering   | 205.9            | \$143,096,750 |
| Animal production, except cattle and poultry and eggs                                      | 169.1            | \$16,399,180  |
| Soybean and other oilseed processing   | 146.6            | \$679,252,633 |
| Limited-service restaurants  | 100.9            | \$7,453,652   |

The soybean and other oilseed processing sector directly contributes approximately **\$679.3 million** to the Lyon County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

| Top Ten Agriculture, Food, and Food Processing Sectors by Output                           |                  |               |
|--|------------------|---------------|
| Sector   | Total Employment | Total Output  |
| Soybean and other oilseed processing   | 146.6            | \$679,252,633 |
| Dog and cat food manufacturing   | 510.5            | \$664,148,876 |
| Meat processed from carcasses  | 906.8            | \$451,918,928 |
| Animal, except poultry, slaughtering   | 205.9            | \$143,096,750 |
| Bread and bakery product, except frozen, manufacturing                                     | 446.4            | \$66,913,509  |
| Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming | 679.1            | \$65,161,096  |
| Wholesale trade  | 271.7            | \$52,839,334  |
| Truck transportation   | 277.8            | \$39,236,177  |
| Oilseed farming  | 28.9             | \$24,461,605  |
| Other animal food manufacturing  | 16.4             | \$20,128,426  |

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Lyon County economy.

| All Agriculture, Food, and Food Processing Sectors   |                  |                  |
|--|------------------|------------------|
| Sector   | Total Employment | Total Output     |
| Oilseed farming  | 28.9             | \$24,461,605.07  |
| Grain farming  | 36.2             | \$10,778,935.43  |
| Vegetable and melon farming  | 1.1              | \$161,543.16     |
| Fruit farming  | 6.3              | \$408,474.86     |
| Tree nut farming   | 0.3              | \$42,948.62      |
| Greenhouse, nursery, and floriculture production   | 0.9              | \$92,302.90      |
| All other crop farming   | 58.2             | \$3,683,396.82   |
| Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming | 679.1            | \$65,161,094.67  |
| Dairy cattle and milk production   | 1.0              | \$313,301.38     |
| Poultry and egg production   | 0.3              | \$167,809.38     |
| Animal production, except cattle and poultry and eggs                                      | 169.1            | \$16,399,179.46  |
| Commercial logging   | 2.1              | \$56,726.67      |
| Commercial hunting and trapping  | 2.1              | \$40,669.99      |
| Support activities for agriculture and forestry  | 100.0            | \$2,673,340.56   |
| Dog and cat food manufacturing   | 510.5            | \$664,148,864.75 |
| Other animal food manufacturing  | 16.4             | \$20,128,425.60  |
| Soybean and other oilseed processing   | 146.6            | \$679,252,624.51 |
| Animal, except poultry, slaughtering   | 205.9            | \$143,096,755.98 |
| Meat processed from carcasses  | 906.8            | \$451,918,945.31 |
| Bread and bakery product, except frozen, manufacturing                                     | 446.4            | \$66,913,505.55  |
| Frozen cakes and other pastries manufacturing  | 1.1              | \$162,138.12     |
| Breweries  | 6.0              | \$2,606,134.41   |
| Wineries   | 0.8              | \$245,486.01     |
| Other leather and allied product manufacturing   | 2.5              | \$228,238.90     |
| Sawmills   | 0.4              | \$119,956.09     |
| Veterinary services  | 43.0             | \$4,933,826.92   |
| Landscape and horticultural services   | 77.9             | \$4,311,432.84   |

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Lyon County, the retail sector was omitted.